Amendments to the Claims

1. (**currently amended**) A light source comprising:

a) a passively Q-switched laser for ~~delivering~~ generating a pulsed primary beam at a primary wavelength~~;~~ ,wherein the passively Q-switched laser comprises an optical cavity containing a gain medium pumped by a pump source, and wherein said passively Q-switched laser generates said pulsed primary beam with a duty cycle ranging from .01% to 1% and a pulse repetition rate of at least 100 kHz;

b) a fiber amplifier coupled to an output of said passively Q-switched laser for receiving said pulsed primary beam and amplifying said pulsed primary beam to produce a pulsed intermediate beam of intermediate pulses at said primary wavelength~~, said intermediate pulses having a format calibrated for a predetermined frequency conversion efficiency~~; and

c) a nonlinear element for frequency converting said pulsed intermediate beam in a single pass by second harmonic generation ~~at said predetermined frequency conversion efficiency~~ to produce a pulsed output beam at an output wavelength.

2. (original) The light source of claim 1, wherein said primary wavelength ranges from 860 nm to 1100 nm.

3. (original) The light source of claim 1, wherein said output wavelength ranges from 430 nm to 550 nm.

4. (original) The light source of claim 1, wherein said fiber amplifier is a cladding-pumped amplifier.

5. (original) The light source of claim 4, wherein said cladding-pumped amplifier has a predetermined core section and a predetermined cladding section.

6. (original) The light source of claim 4, wherein said cladding-pumped amplifier has a length of less than 2 m.

7. (original) The light source of claim 1, wherein said passively Q-switched laser comprises a saturable absorber Q-switch.

8. **(cancelled)**

9. (original) The light source of claim 7, wherein said saturable absorber Q-switch is set such that said pulsed primary beam comprises primary pulses having a pulse width and having an interpulse separation of at least 100 times said pulse width.

10. **(cancelled)**

11. (original) The light source of claim 1, wherein said nonlinear element comprises at least one nonlinear optical crystal.

12. (original) The light source of claim 11, wherein said at least one nonlinear optical crystal comprises a borate.

13. (original) The light source of claim 12, wherein said borate is selected from the group consisting of LBO and BBO. Cal 12

14. **(currently amended)** The light source of claim 1, wherein said ~~predetermined~~ pulsed intermediate beam results in a frequency conversion efficiency ~~is~~ of at least 10%.

15. **(currently amended)** The light source of claim 14, wherein said ~~predetermined~~ frequency conversion efficiency is ~~about~~ at least 50%. Cl 6

16. **(currently amended)** A display system having a light source comprising:

a) a passively Q-switched laser for ~~delivering~~ generating a pulsed primary beam at a primary wavelength~~;~~ ,wherein the passively Q-switched laser comprises an optical cavity containing a gain medium pumped by a pump source, and wherein said passively Q-switched

laser generates said pulsed primary beam with a duty cycle ranging from .01% to 1% and a pulse repetition rate of at least 100 kHz;

b) a fiber amplifier coupled to an output of said passively Q-switched laser for receiving said pulsed primary beam and amplifying said pulsed primary beam to produce a pulsed intermediate beam of intermediate pulses at said primary wavelength~~, said intermediate pulses having a format calibrated for a predetermined frequency conversion efficiency~~; and

c) a nonlinear element for frequency converting said pulsed intermediate beam in a single pass by second harmonic generation ~~at said predetermined frequency conversion efficiency~~ to produce a pulsed output beam at an output wavelength.

17. (original) The display system of claim 16, further comprising:

a) a plurality of display pixels being refreshed at a refresh rate;

b) a synchronizing mechanism for synchronizing output pulses of said pulsed output beam with said refresh rate.

18. (original) The display system of claim 17, wherein said synchronizing mechanism synchronizes said pulses at an integer multiple of said refresh rate.

19. (original) The display system of claim 16, wherein said primary wavelength ranges from 860 nm to 1100 nm.

20. (original) The display system of claim 16, wherein said output wavelength ranges from 430 nm to 550 nm.

21. (original) The display system of claim 16, wherein said fiber amplifier is a cladding-pumped amplifier.

22. (original) The display system of claim 21, wherein said cladding-pumped amplifier has a predetermined core section and a predetermined cladding section.

23. (original) The display system of claim 21, wherein said cladding-pumped amplifier has a length of less than 2 m.

24. (original) The display system of claim 16, wherein said passively Q-switched laser comprises a saturable absorber Q-switch.

25. (**cancelled**)

26. (original) The display system of claim 24, wherein said saturable absorber Q-switch is set such that said pulsed primary beam comprises primary pulses having a pulse width and an interpulse separation of at least 100 times said pulse width.

27. (**cancelled**)

28. (original) The display system of claim 16, wherein said nonlinear element comprises at least one nonlinear optical crystal.

29. (original) The display system of claim 28, wherein said at least one nonlinear optical crystal comprises a borate.

30. (original) The display system of claim 29, wherein said borate is selected from the group consisting of LBO and BBO.

31. (**currently amended**) The display system of claim 16, wherein said ~~predetermined~~ pulsed intermediate beam results in a frequency conversion efficiency ~~is~~ of at least 10%.

32. (**currently amended**) The display system of claim 31, wherein said ~~predetermined~~ frequency conversion efficiency is ~~about~~ at least 50%.